Infection of virtually any organ can occur, but most commonly kidney, liver, spleen, and CNS are involved. Aspergillus is second only to Candida as a cause of fungal endocarditis.

Patients typically present with fever and embolic phenomena. Blood cultures are rarely positive. Prognosis of Aspergillus endocarditis is poor. Even with combined medical and surgical therapy, the mortality approaches 100 percent. Septic embolization has been occasionally reported as a reason for cerebral, myocardial and pulmonary infarctions. Our report represents rare case of myocardial infarction as a part of aspergillus septic emboli in the setting of hepatic cirrhosis as etiology of the immunocompromised state. Autopsy; however could not identify the original infected source.

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30.018

Correlation between HIV-1 viral load and cryptococcal capsular polysaccharide concentration: Evaluation in a clinical setting

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Background: In vitro studies demonstrated that a clinically relevant concentration of cryptococcal polysaccharide enhanced HIV-1 production in peripheral mononuclear cells (Pettoello-Mantovani M, et al. Enhancement of HIV-1 infection by the capsular polysaccharide of *Cryptococcus neoformans*. *Lancet* 1992, 339:21-23). However, the correlation between cryptococcal capsular polysaccharide (CCP) concentrations and HIV-1 viral load has never been assessed in a clinical setting. Considering the immunomodulatory properties of CCP and that extrapulmonary cryptococcosis is one of the most frequent HIV-related opportunistic infections in our region, the evaluation of potential pathophysiological interactions between these pathogens are of importance for development of therapeutic strategies.

Methods: Prospective collection of pretreatment blood samples from antiretroviral naive HIVinfected patients with culture-confirmed cryptococcal meningitis assisted at the Infectious Diseases Hospital ''Francisco Javier Muñiz'', Buenos Aires, Argentina (period 2004-2006).

Informed consent was obtained from all patients. HIV plasma viral load was measured by reverse transcriptase-polymerase chain reaction using the Cobas Amplicor HIV-1 Monitor Test 1.5 (Roche). CCP antigen concentration was determined by a standard commercial assay (Latex-Cryptococcus Antigen Detection System-IMMY, Immunomycologics). A linear regression analysis was performed with *Statistix* 7.0 software. Florencio Fiorini ''Estimulo'' Scholarship by Florencio Fiorini Foundation and by Asociacion Medica Argentina was obtained for the development of the study, as part of an investigation of HIV-1 related cryptococcosis.

Results: During the study, 37 HIV-infected patients with cryptococcal meningitis were enrolled. Data regarding HIV-1 plasma viral load and CCP concentrations were available for 25 patients for the final analysis. Median HIV plasma concentration (copies/mL) was 296000 (range: 1000-750000). Median serum CCP antigen titer was 100 (range: 0-10000). Linear regression analysis found no evidence of a statistical significant correlation between HIV-1 plasma viral load and CCP concentrations ($r = 0.1522$; $p = 0.4676$).

Conclusion: In opposition to *in vitro* findings, HIV-1 plasma viral load has no correlation with CCP concentrations. To the best of our knowledge, this is the first study to assess if there is a relationship between the levels of an opportunistic pathogen in blood and HIV-1 viral load in a real life clinical setting.

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30.019

Risk factors for candidemia-related mortality in a Neonatal Intensive Care Unit (NICU)

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Background: Candidemia is related to significant morbidity and mortality, specially in infants at the NICU. The aim of this study was to identify the risk factors for mortality among these patients

Methods: We retrospectively studied all the patients with positive blood cultures for *Candida* spp. treated in NICU between, January 2003 and December 2008, at the Hospital de Niños ''Ricardo Gutierrez'' in Buenos Aires, Argentina. We analyzed the clinical baseline characteristics and risk factors for mortality: persistence of positive blood cultures, days to central venous catheter (CVC) removal, underlying diseases, secondary compromised organs and species of *Candida*.

Results: During the study period a total of 20 patients were identified. However, 2 patients were excluded, due to insufficient data in the medical records. Ten patients were male (55%); age: median 40 days (range 7-117 ds). All patients were admitted to the NICU, immediately after birth. None of them was less than 28 weeks gestation. The weight at birth was less than 1500 g in only one patient. The most frequent underlying disease was surgical pathology of the gastrointestinal tract (9/18, 50%). Most of the patients had risk factors for candidemia as CVC (14/18, 77,7%), parenteral nutrition (15/18, 83%) and previous use of broad spectrum antibiotics (100%). *Candida albicans* resulted the main agent (9/19, 47%). One patient had two different species of *Candida: albicans* and *tropicalis*. The global mortality rate was 27.7% (5/18). Mortality was associated with: later removal of catheter, mean 1.9 ds *vs*. 5.8ds, ($p = 0.02$) and days to first negative blood culture: mean 4.36 ds *vs*. 9 ds ($p = 0.025$), in survivors vs patients who died, respectively.

Conclusion: The high mortality rate by *Candida* in our setting was similar to the reported by the literature. *Candida albicans* remained the most common isolated specie. Mortality was statistically significant related to persistent candidemia and the delay to remove CVC.

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